

**Performance Characteristics:**

- Frequency band: 1~18GHz
- Insertion loss: 0.6dB@18GHz
- All measurements: 6dB
- Input/Output: 50 ohm match
- Chip size: 0.95 x 1 x 0.1mm<sup>3</sup>

**Product Description:**

CW-AE0118-6 is a GaAs MMIC equalizer chip, widely used to improve in-band fluctuation, equalizer amplitude characteristics, the chip through the back metal through the hole ground, input and output consider the influence of gold wire bonding, recommended to use 2 diameter 25um gold wire bonding, bonding line length about 300um is the best.

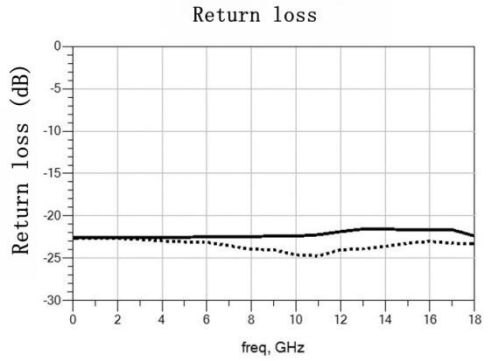
**Electrical parameters:** (T<sub>A</sub>=25°C)

Indicators	Minimum	Typical value	Maximum value	Units
Frequency range	1~18			GHz
Insertion loss @18GHz	-	0.6	-	dB
Even measure	-	6	-	dB
Return loss	-	22	-	dB

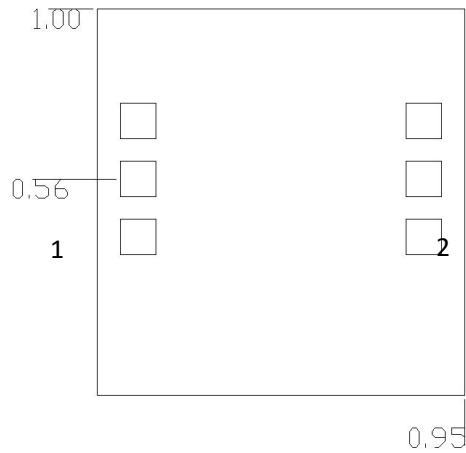
**Use limiting parameters:**

Input power	+30dBm
Storage temperature	-65°C~175°C
Service temperature	-55°C~85°C

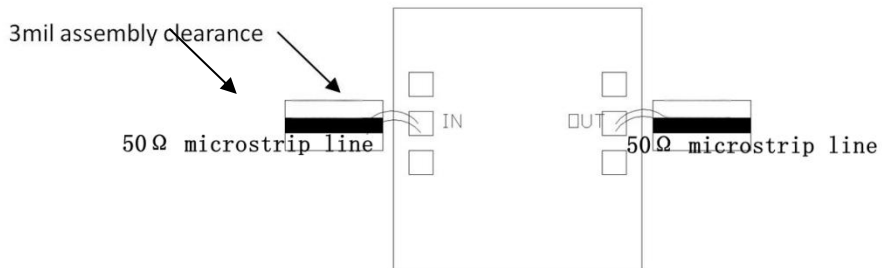
**Typical curve:**



**Dimensional drawing: (unit mm)**



**Suggested assembly drawing:**



Pad number	Function	Description
1,2	RF1, RF2	Rf branch end of the series pad

### Instructions for use:

**Storage:** The chip must be placed in a container with electrostatic protection and stored in a nitrogen environment.

**Cleaning treatment:** The bare chip must be operated and used in a purified environment. It is forbidden to use liquid cleaning agent to clean the chip.

**Electrostatic protection:** Strictly comply with the ESD protection requirements to avoid electrostatic damage to the components.

**General operation:** Use vacuum chuck or precision pointed tweezers to pick up the chip. Avoid touching the surface of the chip with tools or fingers during handling.

**Mounting operation:** The chip can be installed using AuSn solder eutectic welding or conductive adhesive bonding process. The mounting surface must be clean and flat.

**Bonding operation:** Input and output with 2 (recommended diameter of 25um gold wire) bonding wire, bonding wire length less than 250um is optimal. It is recommended to use the smallest possible ultrasonic energy. Bonding starts at the pressure point on the chip and ends at the package (or substrate)